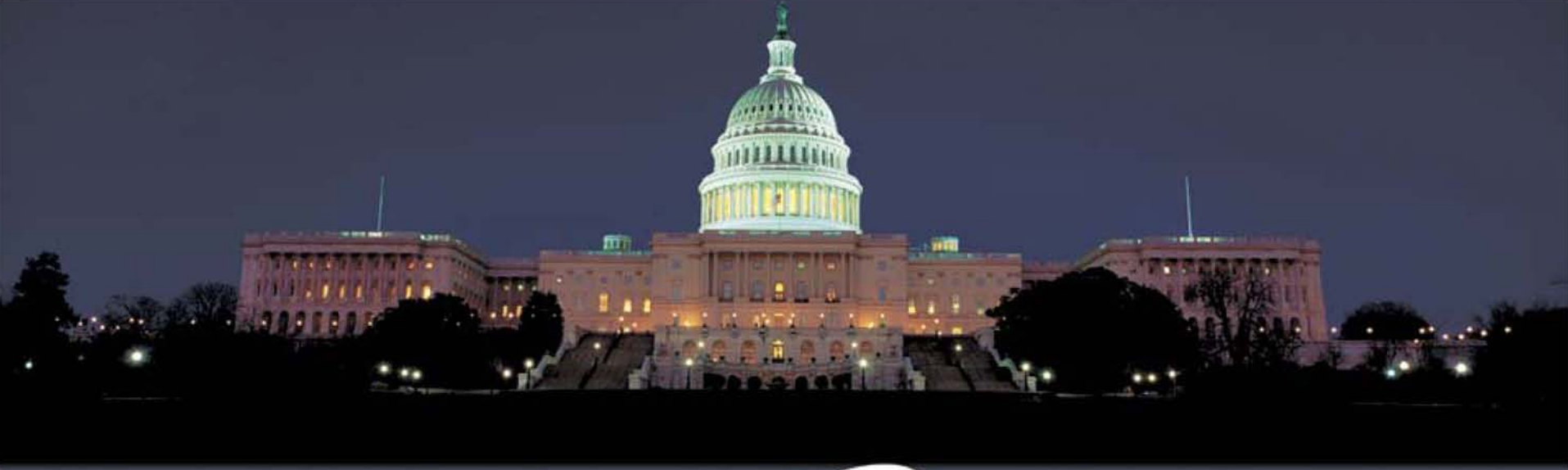

dish NETWORK

Satellite Digital Carriage Issues

Overview

- All-Digital System
- Statute is Ambiguous
- Cable and Satellite Comparison
- Case Study: San Francisco DMA
- A System-wide Impact
- A DBS-Specific Approach

An All-Digital System

- DISH Network is the 3rd largest MVPD in the U.S. with 13.6 million subscribers
- All DISH Network subscribers are ready for the digital transition today
  - All digital service – no analog subscribers
  - DISH subscribers have option of single set-top box that serves multiple TVs in a household.

Satellite Must Carry Regime

- Section 338 is silent on digital must carry rules for 48 contiguous states.
  - *Conference Report says that Congress "do[es] not take any position regarding the application of must-carry rules to carriage of digital television stations by either cable or satellite systems."*
- In contrast, Section 338 establishes clear satellite digital must carry obligations for Alaska and Hawaii
  - Digital must carry obligation went into effect June 2007
  - DISH Network in compliance at substantial expense
  - Alaska and Hawaii presented unique case: low population density, remote geographic location, and relatively few broadcasters

Cable and Satellite: An Apples and Oranges Comparison

- Act provides for different carriage rules for cable and satellite reflective of technological and operational differences, 47 USC 338(J)

- Cable and satellite both deliver video, but
  - Cable providers have large high-capacity terrestrial pipe
  - Cable is not constrained by orbital slots or limited frequencies.
  - Cable upgrades and infrastructure investment also used to provide new services (data, voice).

Current Capacity Breakdown

Cable

Satellite

Digital Signal Bandwidth

Cable can save capacity through transition from analog to digital

Analog signal on cable system

Full 19.4 digital signal on cable system

In contrast, the transition will add capacity burden to all-digital DBS platform

Converted analog signal on DBS system

Full 19.4 digital signal on DBS system

Locals Delivered by Spot Beams

- Analog locals in 175 of 210 markets (over 1500 channels).
  - Includes must carry stations (as many as 18 per market)
  - One transponder holds approximately 12-13 SD channels.

SD Transponder Today

- Some HD locals provided in 29 markets
  - One transponder holds approximately 4 HD local channels.

HD Transponder Today

San Francisco DMA

- 20 total broadcasters in SF DMA. Served today by 3 transponders on two satellite spot beams.
- A SD and HD obligation would require up to 4 more transponder frequencies.

7 SD **4 HD** **4 HD**

4 HD

13 SD **4 HD** **4 HD**

Ripple Effect System-Wide

- System-wide impact on 175 markets with 1500 local channels
- Back of envelope math: 3 SD networks = 1 HD network.
- HD obligation would require:

1500 SD channels

X 3 (HD factor)

4500 SD equivalents

A DBS-Specific Approach

- Cable regime is a poor fit operationally and legally;
- Unique burden on satellite providers;
- Ambiguous statute should be interpreted to minimize constitutional concerns;
- Explore alternative means to accomplish statutory objective: OTA antenna solution, IPTV, downconversion, spectrum sharing, duplication limits, capacity cap similar to cable, Reverse Band, national feeds, etc.